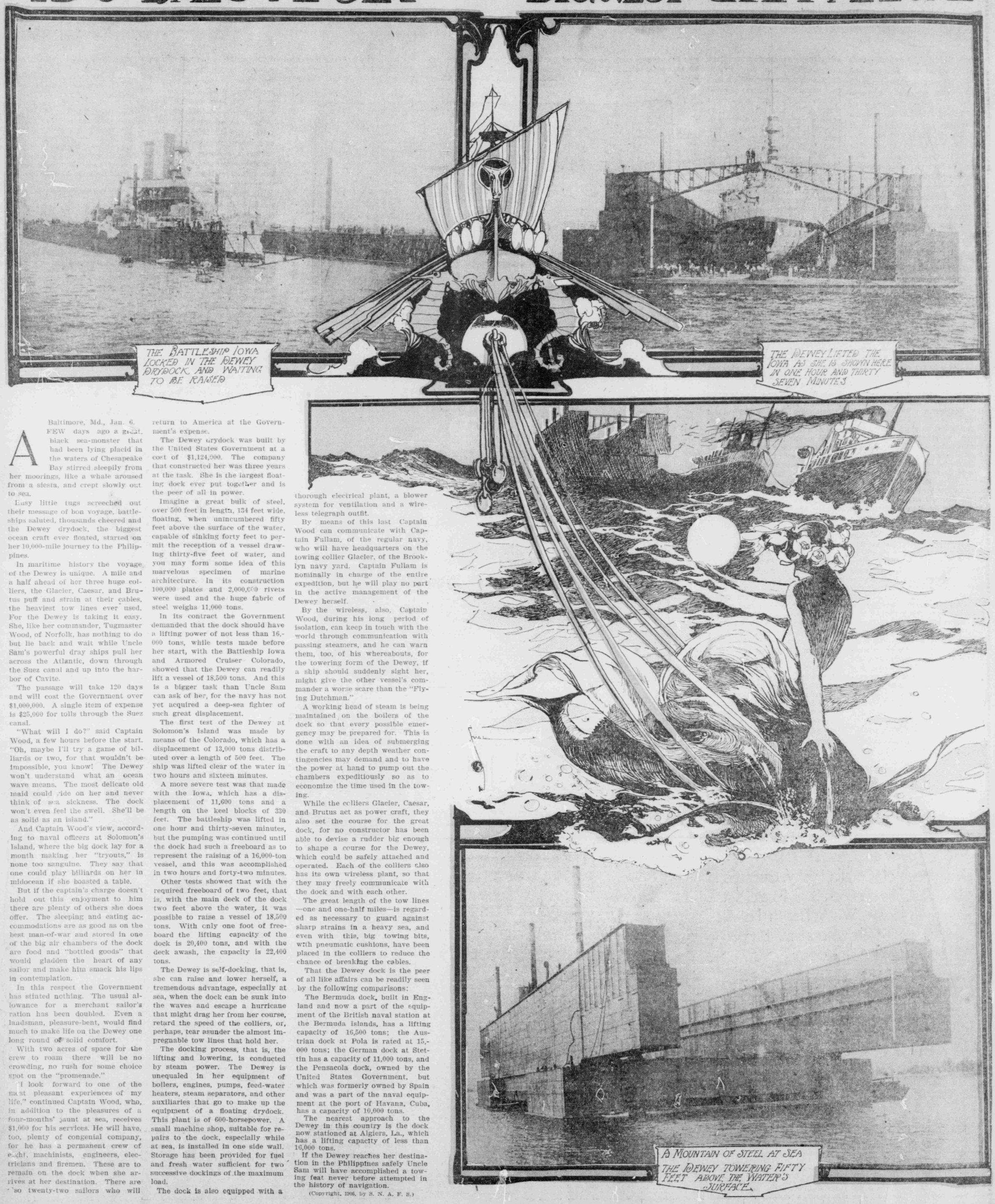
120 DAYS AT SEA ON THE BIGGEST CRAFT AFLOAT



THE BATTLESHIP IOWA LOCKED IN THE DEWEY DRYDOCK AND WAITING TO BE RAISED

THE DEWEY LIFTED THE IOWA AS SHE IS SHOWN HERE IN ONE HOUR AND THIRTY SEVEN MINUTES

A MOUNTAIN OF STEEL AT SEA THE DEWEY TOWERING FIFTY FEET ABOVE THE WATER'S SURFACE

Baltimore, Md., Jan. 6.

A FEW days ago a great, black sea-monster that had been lying placid in the waters of Chesapeake Bay stirred sleepily from her moorings, like a whale aroused from a siesta, and crept slowly out to sea.

Easy little tugs screeched out their message of bon voyage, battleships saluted, thousands cheered and the Dewey drydock, the biggest ocean craft ever floated, started on her 10,000-mile journey to the Philippines.

In maritime history the voyage of the Dewey is unique. A mile and a half ahead of her three huge colliers, the Glacier, Caesar, and Brutus puff and strain at their cables, the heaviest tow lines ever used. For the Dewey is taking it easy. She, like her commander, Tugmaster Wood, of Norfolk, has nothing to do but lie back and wait while Uncle Sam's powerful dray ships pull her across the Atlantic, down through the Suez canal and up into the harbor of Cavite.

The passage will take 120 days and will cost the Government over $1,000,000. A single item of expense is $25,000 for tolls through the Suez canal.

"What will I do?" said Captain Wood, a few hours before the start. "Oh, maybe I'll try a game of billiards or two, for that wouldn't be impossible, you know! The Dewey won't understand what an ocean wave means. The most delicate old maid could ride on her and never think of sea sickness. The dock won't even feel the swell. She'll be as solid as an island."

And Captain Wood's view, according to naval officers at Solomon's Island, where the big dock lay for a month making her "tryouts," is none too sanguine. They say that one could play billiards on her in midocean if she boasted a table.

But if the captain's charge doesn't hold out this enjoyment to him there are plenty of others she does offer. The sleeping and eating accommodations are as good as on the best man-of-war and stored in one of the big air chambers of the dock are food and "bottled goods" that would gladden the heart of any sailor and make him smack his lips in contemplation.

In this respect the Government has stinted nothing. The usual allowance for a merchant sailor's ration has been doubled. Even a landsman, pleasure-bent, would find much to make life on the Dewey one long round of solid comfort.

With two acres of space for the crew to roam there will be no crowding, no rush for some choice spot on the "promenade."

"I look forward to one of the most pleasant experiences of my life," continued Captain Wood, who, in addition to the pleasures of a four-months' jaunt at sea, receives $1,000 for his services. He will have, too, plenty of congenial company, for he has a permanent crew of eight, machinists, engineers, electricians and firemen. These are to remain on the dock when she arrives at her destination. There are also twenty-two sailors who will return to America at the Government's expense.

The Dewey drydock was built by the United States Government at a cost of $1,124,000. The company that constructed her was three years at the task. She is the largest floating dock ever put together and is the peer of all in power.

Imagine a great bulk of steel, over 500 feet in length, 134 feet wide, floating, when unincumbered fifty feet above the surface of the water, capable of sinking forty feet to permit the reception of a vessel drawing thirty-five feet of water, and you may form some idea of this marvelous specimen of marine architecture. In its construction 100,000 plates and 2,000,000 rivets were used and the huge fabric of steel weighs 11,000 tons.

In its contract the Government demanded that the dock should have a lifting power of not less than 16,000 tons, while tests made before her start, with the Battleship Iowa and Armored Cruiser Colorado, showed that the Dewey can readily lift a vessel of 18,500 tons. And this is a bigger task than Uncle Sam can ask of her, for the navy has not yet acquired a deep-sea fighter of such great displacement.

The first test of the Dewey at Solomon's Island was made by means of the Colorado, which has a displacement of 13,000 tons distributed over a length of 500 feet. The ship was lifted clear of the water in two hours and sixteen minutes.

A more severe test was that made with the Iowa, which has a displacement of 11,600 tons and a length on the keel blocks of 330 feet. The battleship was lifted in one hour and thirty-seven minutes, but the pumping was continued until the dock had such a freeboard as to represent the raising of a 16,000-ton vessel, and this was accomplished in two hours and forty-two minutes.

Other tests showed that with the required freeboard of two feet, that is, with the main deck of the dock two feet above the water, it was possible to raise a vessel of 18,500 tons. With only one foot of freeboard the lifting capacity of the dock is 20,400 tons, and with the deck awash, the capacity is 22,400 tons.

The Dewey is self-docking, that is, she can raise and lower herself, a tremendous advantage, especially at sea, when the dock can be sunk into the waves and escape a hurricane that might drag her from her course, retard the speed of the colliers, or, perhaps, tear asunder the almost impregnable tow lines that hold her.

The docking process, that is, the lifting and lowering, is conducted by steam power. The Dewey is unequaled in her equipment of boilers, engines, pumps, feed-water heaters, steam separators, and other auxiliaries that go to make up the equipment of a floating drydock. This plant is of 600-horsepower. A small machine shop, suitable for repairs to the dock, especially while at sea, is installed in one side wall. Storage has been provided for fuel and fresh water sufficient for two successive dockings of the maximum load.

The dock is also equipped with a thorough electrical plant, a blower system for ventilation and a wireless telegraph outfit.

By means of this last Captain Wood can communicate with Captain Fullam, of the regular navy, who will have headquarters on the towing collier Glacier, of the Brooklyn navy yard. Captain Fullam is nominally in charge of the entire expedition, but he will play no part in the active management of the Dewey herself.

By the wireless, also, Captain Wood, during his long period of isolation, can keep in touch with the world through communication with passing steamers, and he can warn them, too, of his whereabouts, for the towering form of the Dewey, if a ship should suddenly sight her, might give the other vessel's commander a worse scare than the "Flying Dutchman."

A working head of steam is being maintained on the boilers of the dock so that every possible emergency may be prepared for. This is done with an idea of submerging the craft to any depth weather contingencies may demand and to have the power at hand to pump out the chambers expeditiously so as to economize the time used in the towing.

While the colliers Glacier, Caesar, and Brutus act as power craft, they also set the course for the great dock, for no constructor has been able to devise a rudder big enough to shape a course for the Dewey, which could be safely attached and operated. Each of the colliers also has its own wireless plant, so that they may freely communicate with the dock and with each other.

The great length of the tow lines —one and one-half miles—is regarded as necessary to guard against sharp strains in a heavy sea, and even with this, big towing bits, with pneumatic cushions, have been placed in the colliers to reduce the chance of breaking the cables.

That the Dewey dock is the peer of all like affairs can be readily seen by the following comparisons:

The Bermuda dock, built in England and now a part of the equipment of the British naval station at the Bermuda Islands, has a lifting capacity of 16,500 tons; the Austrian dock at Pola is rated at 15,000 tons; the German dock at Stettin has a capacity of 11,000 tons, and the Pensacola dock, owned by the United States Government, but which was formerly owned by Spain and was a part of the naval equipment at the port of Havana, Cuba, has a capacity of 10,000 tons.

The nearest approach to the Dewey in this country is the dock now stationed at Algiers, La., which has a lifting capacity of less than 16,000 tons.

If the Dewey reaches her destination in the Philippines safely Uncle Sam will have accomplished a towing feat never before attempted in the history of navigation.